



# SUBSTITUTE SEQUENCE LISTING

<110> Menashe, Bar-Eli  
Green, Larry L.

<120> USE OF ANTIBODIES AGAINST THE MUC18  
ANTIGEN

<130> ABGENIX.030C1

<140> 10/660,357

<141> 2003-09-10

<150> 10/330,580

<151> 2002-12-26

<150> 60/346,460

<151> 2001-12-28

<160> 90

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 121

<212> PRT

<213> Homo Sapiens

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Thr	Leu	Ser	Leu	Thr	Cys	Thr	Val	Ser	Gly	Gly	Ser	Ile	Ser	Ser	Tyr	
			20					25					30			
Tyr	Trp	Ser	Trp	Ile	Arg	Gln	Pro	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Ile	
		35					40					45				
Gly	Tyr	Ile	Tyr	Tyr	Thr	Trp	Thr	Ser	Asn	Tyr	Asn	Pro	Ser	Leu	Lys	
	50					55				60						
Ser	Arg	Val	Thr	Ile	Ser	Val	Asp	Thr	Ser	Lys	Asn	Gln	Phe	Ser	Leu	
65					70				75					80		
Arg	Leu	Ser	Ser	Val	Thr	Ala	Ala	Asp	Thr	Ala	Val	Tyr	Tyr	Cys	Ala	
				85					90					95		
Arg	Asp	Gln	Gly	Gln	Trp	Leu	Leu	Pro	Asp	Ala	Phe	Asp	Ile	Trp	Gly	
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Gln	Gly	Thr	Met	Val	Thr	Val	Ser	Ser								
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<212> PRT

<213> Homo Sapiens

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Asp	Ile	Val	Met	Thr	Gln	Ser	Pro	Leu	Ser	Leu	Pro	Val	Thr	Pro	Gly	
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Glu	Pro	Ala	Ser	Ile	Ser	Cys	Arg	Ser	Ser	Gln	Ser	Leu	Leu	Arg	Ser	



				85					90					95			
Cys	Ala	Arg	Gly	Gly	Asp	Gly	Tyr	Lys	Tyr	Trp	Gly	Gln	Gly	Thr	Leu		
			100					105					110				
Val	Thr	Val	Ser	Ser													
			115														

<210> 6  
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 <213> Homo Sapiens

<400> 6																	
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Glu	Arg	Ala	Thr	Leu	Ser	Cys	Arg	Ala	Ser	Gln	Ser	Val	Ser	Asn	Asn		
			20					25					30				
Leu	Ala	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Gln	Ala	Pro	Arg	Leu	Leu	Ile		
		35				40					45						
Tyr	Gly	Ala	Ser	Thr	Arg	Ala	Thr	Gly	Ile	Pro	Ala	Arg	Phe	Ser	Gly		
	50					55				60							
Ser	Gly	Ser	Gly	Thr	Glu	Phe	Thr	Leu	Thr	Ile	Ser	Ser	Leu	Gln	Ser		
65				70					75					80			
Glu	Asp	Phe	Ala	Val	Tyr	Tyr	Cys	Gln	Gln	Tyr	Asn	Asn	Trp	Pro	Arg		
			85					90					95				
Thr	Phe	Gly	Gln	Gly	Thr	Lys	Val	Glu	Ile	Lys							
			100					105									

<210> 7  
 <211> 352  
 <212> DNA  
 <213> Homo Sapiens

<400> 7																	
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cagcaccag	ggaagggcct	ggagtggatt	gggtacatct	attacagtgg	gagcacctac	180											
tacaaccgt	ccctcaagag	tcgagttacc	atatcagtag	acacgtctaa	gaaccagttc	240											
tccctgaagc	tgagctctgt	gactgccgcg	gacacggccg	tgtattactg	tgcgagaggg	300											
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<210> 8  
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 <212> DNA  
 <213> Homo Sapiens

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ggccaggctc	ccaggtcct	catctatggt	gcatccacca	gggccactgg	tatcccagcc	180											
aggttcagtg	gcagtgggtc	tgggacagag	ttcactctca	ccatcagcag	cctgcagtct	240											
gaagattttg	cagtttatta	ctgtcagcag	tataataact	ggcctcggac	gttcggccaa	300											
gggaccaagg	tggaatcaa	ac				322											

<210> 9  
 <211> 121

<212> PRT  
 <213> Homo Sapiens

<400> 9  
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 1 5 10 15  
 Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly Ser Ile Ser Ser Tyr  
 20 25 30  
 Tyr Trp Ser Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile  
 35 40 45  
 Gly Tyr Ile Tyr Tyr Thr Trp Thr Thr Asn Tyr Asn Pro Ser Leu Lys  
 50 55 60  
 Ser Arg Val Thr Ile Ser Val Asp Thr Ser Lys Asn Gln Phe Ser Leu  
 65 70 75 80  
 Arg Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Leu Tyr Tyr Cys Ala  
 85 90 95  
 Arg Asp Gln Gly Gln Trp Leu Leu Pro Asp Ala Phe Asp Ile Trp Gly  
 100 105 110  
 Gln Gly Thr Met Val Thr Val Ser Ser  
 115 120

<210> 10  
 <211> 109  
 <212> PRT  
 <213> Homo Sapiens

<400> 10  
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
 1 5 10 15  
 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Asn Tyr  
 20 25 30  
 Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile  
 35 40 45  
 Tyr Gly Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly  
 50 55 60  
 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro  
 65 70 75 80  
 Glu Asp Phe Ala Thr Tyr Tyr Cys Arg Gln Ser Tyr Ser Thr Pro Pro  
 85 90 95  
 Glu Cys Ser Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys  
 100 105

<210> 11  
 <211> 364  
 <212> DNA  
 <213> Homo Sapiens

<400> 11  
 cagggtgcagc tgcaggagtc gggcccagga ctggtgaagc cttcggagac cctgtccctc 60  
 acctgcactg tctctggtgg ctccatcagt agttactact ggagctggat ccggcagccc 120  
 ccagggaagg gactggagtg gattggctat atctattaca cttggaccac caactacaac 180  
 cctccctca agagtcgcgt caccatatca gtggacacgt ccaagaacca gttctccctg 240  
 aggctgagct ctgtgaccgc tgcggacacg gccctttatt actgtgagag agatcagggg 300  
 cagtggttac taccgatgc ttttgatata tggggccaag ggacaatggt caccgtctct 360  
 tcag 364

<210> 12  
 <211> 328  
 <212> DNA  
 <213> Homo Sapiens

<400> 12  
 gacatccaga tgacccagtc tccatcctcc ctgtctgcat ctgtaggaga cagagtcacc 60  
 atcacttgcc gggcaagtca gagcattagc aactatttaa attggtatca gcagaaacca 120  
 ggaaaagccc ctaagctcct gatctatggt gcatccagtt tgcaaagtgg ggtcccatca 180  
 aggttcagtg gcagtggatc tgggacagat ttcactctca ccatcagcag tctgcaacct 240  
 gaagattttg caacctacta ctgtcgacag agttacagta cccctccgga gtgcagtttt 300  
 ggccagggga ccaagctgga gatcaaac 328

<210> 13  
 <211> 117  
 <212> PRT  
 <213> Homo Sapiens

<400> 13  
 Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Gln  
 1 5 10 15  
 Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly Ser Ile Ser Ser Gly  
 20 25 30  
 Gly Tyr Tyr Trp Thr Trp Ile Arg Gln His Pro Gly Lys Gly Leu Glu  
 35 40 45  
 Trp Ile Gly Phe Ile Tyr Tyr Ser Gly Ser Thr Tyr Tyr Asn Pro Ser  
 50 55 60  
 Leu Lys Ser Arg Val Thr Ile Ser Val Asp Thr Ser Lys Asn Gln Phe  
 65 70 75 80  
 Ser Leu Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr  
 85 90 95  
 Cys Ala Arg Glu Gly Asp Gly Phe Asp Tyr Trp Gly Gln Gly Thr Leu  
 100 105 110  
 Val Thr Val Ser Ser  
 115

<210> 14  
 <211> 107  
 <212> PRT  
 <213> Homo Sapiens

<400> 14  
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
 1 5 10 15  
 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp  
 20 25 30  
 Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile  
 35 40 45  
 Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly  
 50 55 60  
 Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro  
 65 70 75 80  
 Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro Leu  
 85 90 95  
 Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys

100

105

<210> 15  
 <211> 352  
 <212> DNA  
 <213> Homo Sapiens

<400> 15  
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 acctgcactg tctctggtgg ctccatcagc agtggtggtt actactggac ttggatccgc 120  
 cagcaccagc ggaagggcct ggagtggatt gggttcatct attacagtgg gagcacctac 180  
 tacaaccctg ccctcaagag tgcagttacc atatcagtag acacgtctaa gaaccagttc 240  
 tccctgaagc tgagctctgt gactgccgcg gacacggccg tgtattactg tgcgagagag 300  
 ggagatggct ttgactactg gggccaggga accctgggtc ccgtctcctc ag 352

<210> 16  
 <211> 322  
 <212> DNA  
 <213> Homo Sapiens

<400> 16  
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 atcacttgcc gggcaagtca gggcattaga aatgatttag gctggtatca gcagaaacca 120  
 gggaaagccc ctaagcgcct gatctatgct gcatccagtt tgcaaagtgg ggtcccatca 180  
 aggttcagcg gcagtggatc tgggacagaa ttcactctca caatcagcag cctgcagcct 240  
 gaagatthtt caacttatta ctgtctacag cataatagtt acccgctcac tttcggcgga 300  
 gggaccaagg tggagatcaa ac 322

<210> 17  
 <211> 121  
 <212> PRT  
 <213> Homo Sapiens

<400> 17  
 Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu  
 1 5 10 15  
 Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly Ser Ile Ser Ser Tyr  
 20 25 30  
 Tyr Trp Ser Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile  
 35 40 45  
 Gly Tyr Ile Tyr Tyr Thr Trp Thr Ser Asn Tyr Asn Pro Ser Leu Lys  
 50 55 60  
 Ser Arg Val Thr Ile Ser Val Asp Thr Ser Lys Asn Gln Phe Ser Leu  
 65 70 75 80  
 Arg Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala  
 85 90 95  
 Arg Asp Gln Gly Gln Trp Leu Leu Pro Asp Ala Phe Asp Ile Trp Gly  
 100 105 110  
 Gln Gly Thr Met Val Thr Val Ser Ser  
 115 120

<210> 18  
 <211> 107  
 <212> PRT  
 <213> Homo Sapiens

<400> 18  
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
 1 5 10 15  
 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp  
 20 25 30  
 Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile  
 35 40 45  
 Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly  
 50 55 60  
 Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro  
 65 70 75 80  
 Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro Trp  
 85 90 95  
 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys  
 100 105

<210> 19  
 <211> 364  
 <212> DNA  
 <213> Homo Sapiens

<400> 19  
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 acctgcactg tctctggttg ctccatcagt agttactact ggagctggat ccggcagccc 120  
 ccagggaagg gactggagtg gattggtat atctattaca cttggacctc caactacaac 180  
 ccctccctca agagtcgctg caccatatca gtggacacgt ccaagaacca gttctccctg 240  
 aggtgagtt ctgtgaccgc tgcggacacg gccgtttact actgtgctgag agatcagggg 300  
 cagtggttac taccgatgc ttttgatata tggggccaag ggacaatggt caccgtctct 360  
 tcag 364

<210> 20  
 <211> 322  
 <212> DNA  
 <213> Homo Sapiens

<400> 20  
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 atcacttgcc gggcaagtca gggcattaga aatgatttag gctggtatca gcagaaacca 120  
 gggaaagccc ctaagcgctt gatctatgct gcatccagtt tgcaaagtgg ggtcccatca 180  
 aggttcagcg gcagtggatc tgggacagag ttcactctca caatcagcag cctgcagcct 240  
 gaagattttg caacttatta ctgtctacag cataatagtt acccgtggac gttcggccaa 300  
 gggaccaagg tggaaatcaa ac 322

<210> 21  
 <211> 123  
 <212> PRT  
 <213> Homo Sapiens

<400> 21  
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
 1 5 10 15  
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Phe Ser Tyr  
 20 25 30  
 Gly Phe Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Leu  
 35 40 45

Gly Trp Ile Ser Ala Tyr Asn Gly Asn Thr Asn Tyr Ala Gln Lys Leu  
 50 55 60  
 Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr  
 65 70 75 80  
 Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys  
 85 90 95  
 Ala Arg Glu Thr Lys Val Arg Gly Val His Tyr Tyr Gly Met Asp Val  
 100 105 110  
 Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser  
 115 120

<210> 22  
 <211> 113  
 <212> PRT  
 <213> Homo Sapiens

<400> 22  
 Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly  
 1 5 10 15  
 Glu Arg Ala Thr Ile Ile Cys Lys Ser Ser Gln Ser Ile Leu Tyr Ser  
 20 25 30  
 Ser Asn Asn Lys Asn Tyr Leu Gly Trp Tyr Gln Gln Lys Pro Gly Gln  
 35 40 45  
 Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val  
 50 55 60  
 Pro Ala Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr  
 65 70 75 80  
 Ile Asn Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln  
 85 90 95  
 Tyr Tyr Ser Thr Pro Arg Ser Phe Gly Gln Gly Thr Met Val Glu Ile  
 100 105 110  
 Lys

<210> 23  
 <211> 370  
 <212> DNA  
 <213> Homo Sapiens

<400> 23  
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 cctggacaag ggcttgagtg gctgggatgg atcagcgctt acaatggtaa cacaaactat 180  
 gcacagaagc tccagggcag agtcaccatg accacagaca cttccacgag cacagcctac 240  
 atggagctga ggagcctgag atctgacgac acggccgtgt attactgtgc gagagaaact 300  
 aaggttcggg gagtccacta ctacggtatg gacgtctggg gccaaaggac cacggtcacc 360  
 gtctcctcag 370

<210> 24  
 <211> 340  
 <212> DNA  
 <213> Homo Sapiens

<400> 24  
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atcatctgca agtccagcca gagtatttta tacagctcca acaataagaa ctacttaggt 120
tggtaccagc agaaaccagg acagcctcct aagctgctca tttactgggc atctaccggg 180
gaatccgggg tccctgcccg attcagtggc agcgggtctg ggacagattt cactctcacc 240
atcaacagcc tgcaggctga agatgtggca gtttattact gtcagcaata ttatagtact 300
cctcggtcgt tcggccaagg gaccatgggtg gaaatcaaac 340

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<210> 25
<211> 119
<212> PRT
<213> Homo Sapiens

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<400> 25
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Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly Ser Ile Asn Ser Gly
 20          25          30
Gly Cys Tyr Trp Ser Trp Ile Arg Gln His Pro Gly Lys Gly Leu Glu
 35          40          45
Trp Ile Gly Tyr Ile Tyr Ser Ser Gly Ser Thr Tyr Tyr Asn Pro Ser
 50          55          60
Leu Lys Ser Arg Ile Thr Leu Ser Val Asp Thr Ser Lys Asn Gln Phe
 65          70          75          80
Ser Leu Lys Leu Asn Ser Met Thr Ala Ala Asp Thr Ala Val Tyr Tyr
 85          90          95
Cys Ala Arg Asp Arg Glu Thr Ala Gly Phe Asp Tyr Trp Gly Gln Gly
100          105          110
Thr Leu Val Thr Val Ser Ser
115

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<210> 26
<211> 107
<212> PRT
<213> Homo Sapiens

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<400> 26
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1          5          10          15
Asp Arg Val Thr Ile Thr Cys Gln Ala Ser Gln Asp Ile Asn Asn Tyr
 20          25          30
Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35          40          45
Tyr Asp Ala Ser Asn Leu Glu Thr Gly Val Pro Ser Arg Phe Ser Gly
 50          55          60
Ser Gly Ser Gly Thr Asp Phe Thr Phe Thr Ile Ser Gly Leu Gln Pro
 65          70          75          80
Glu Asp Ile Ala Thr Tyr Tyr Cys Gln Gln Tyr Asp Thr Leu Pro Leu
 85          90          95
Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
100          105

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<210> 27
<211> 358
<212> DNA
<213> Homo Sapiens

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<400> 27  
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cagcaccagc ggaagggcct ggagtggatt gggtagatct attccagtgg gagcacctac 180  
tacaaccctg ccctcaagag tcgaattacc ttatcagtag acacgtctaa gaaccagttc 240  
tcctgaagc tgaactctat gactgccgcg gacacggccg tgtattactg tgcgagagat 300  
cgggaaacag ctggttttga ctactggggc caggggaacc tggtcaccgt ctctcag 358

<210> 28  
<211> 322  
<212> DNA  
<213> Homo Sapiens

<400> 28  
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atcacttgcc aggcgagtc gacattaac aactatttaa attggtatca gcagaaacca 120  
gggaaagccc ctaagctcct gatctacgat gcatccaatt tggaaacagg ggtcccatca 180  
aggttcagtg gaagtggatc tgggacagat ttactttca ccatcagcgg cctgcagcct 240  
gaggatattg caacatatta ctgtcaacag tatgatactc tccctctcac ttctggcggc 300  
gggaccaagg tggagatcaa ac 322

<210> 29  
<211> 120  
<212> PRT  
<213> Homo Sapiens

<400> 29  
Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg  
1 5 10 15  
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr  
20 25 30  
Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val  
35 40 45  
Ala Val Ile Ser Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val  
50 55 60  
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr  
65 70 75 80  
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys  
85 90 95  
Ala Arg Ser Ile Phe Gly Val Val Ile Asp Tyr Gly Met Asp Val Trp  
100 105 110  
Gly Gln Gly Thr Thr Val Thr Val  
115 120

<210> 30  
<211> 107  
<212> PRT  
<213> Homo Sapiens

<400> 30  
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
1 5 10 15  
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Tyr  
20 25 30  
Leu Ala Trp Tyr Gln Gln Asn Pro Gly Lys Val Pro Lys Leu Leu Ile  
35 40 45

Tyr Gly Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly  
 50 55 60  
 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro  
 65 70 75 80  
 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Lys Phe Ser Ser Pro Pro Phe  
 85 90 95  
 Thr Phe Gly Pro Gly Thr Lys Val Asp Ile Ser  
 100 105

<210> 31  
 <211> 367  
 <212> DNA  
 <213> Homo Sapiens

<400> 31  
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 tcctgtgcag cctctggatt caccttcagt agctatgcc tgcactgggt ccgccaggct 120  
 ccaggcaagg ggctggagtg ggtggcagtt atatcatatg atggaagtaa taaatactat 180  
 gcagactccg tgaagggccg attcaccatc tccagagaca attccaagaa cacgctgtat 240  
 ctgcaaatac acagcctgag agctgaggac acggctgtgt attactgtgc gagatcgatt 300  
 tttggagtgg ttatcgacta cggtatggac gtctggggcc aagggaccac ggtcaccgctc 360  
 tcctcag 367

<210> 32  
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 <212> DNA  
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<400> 32  
 gacatccaga tgaccagtc tccatcctcc ctgtctgcat ctgtaggaga cagagtcacc 60  
 atcacttgcc gggcgagtc gggcattaga aattatttag cctgggtatca gcagaatcca 120  
 gggaaagtcc ctaagctcct gatctatggt gcatccactt tgcaatcagg ggtcccatct 180  
 cggttcagtg gcagtggatc tgggacagat ttcactctca ccatcagcag cctgcagcct 240  
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<210> 33  
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 <212> PRT  
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<400> 33  
 Gln Val Gln Leu Glu Gln Ser Gly Pro Gly Leu Val Lys Pro Ser Glu  
 1 5 10 15  
 Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly Ser Ile Ser Ser Gly  
 20 25 30  
 Thr Tyr His Trp Ser Trp Ile Arg Gln His Pro Gly Arg Gly Leu Glu  
 35 40 45  
 Trp Ile Gly Tyr Ile Tyr Tyr Ser Gly Ser Thr Tyr His Asn Pro Ser  
 50 55 60  
 Leu Lys Ser Arg Ile Thr Ile Ser Val Asp Thr Ser Lys Asn Gln Phe  
 65 70 75 80  
 Ser Leu Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr  
 85 90 95  
 Cys Ala Arg Gly Gly Asp Gly Tyr Arg Tyr Trp Gly Gln Gly Thr Leu  
 100 105 110

Val Thr Val Ser Ser  
115

<210> 34  
<211> 107  
<212> PRT  
<213> Homo Sapiens

<400> 34  
Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu Ser Val Ser Pro Gly  
1 5 10 15  
Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Ile Ser Asn Asn  
20 25 30  
Phe Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile  
35 40 45  
Phe Gly Ala Ser Thr Arg Ala Thr Gly Ile Pro Ala Arg Phe Ser Gly  
50 55 60  
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Ser  
65 70 75 80  
Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Asn Asn Trp Pro Arg  
85 90 95  
Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys  
100 105

<210> 35  
<211> 352  
<212> DNA  
<213> Homo Sapiens

<400> 35  
caggtgcagc tggagcagtc ggggccagga ctggtgaagc cttcagagac cctgtccctc 60  
acctgcactg tctctggtgg ctccatcagc agtggtactt accactggag ctggatccgc 120  
cagcaccagc ggaggggcct ggagtggatt ggatacatct attacagtgg gagcacctac 180  
cacaaccgt cctcaagag tcgaattacc atatcagtag acacgtctaa gaaccagttc 240  
tcctgaagc tgagctctgt gacggccgcg gacacggccg tgtattactg tgcgagaggg 300  
ggagatggct acagatactg gggccagga accctgggtca ccgtctctc ag 352

<210> 36  
<211> 322  
<212> DNA  
<213> Homo Sapiens

<400> 36  
gaaatagtga tgacgcagtc tccagccacc ctgtctgtgt ctccagggga aagagccacc 60  
ctctcctgca gggccagtca gagtattagc aacaacttcg cctggtacca gcagaaacct 120  
ggccaggctc ccaggctcct catctttggt gcatccacca gggccactgg tatcccagcc 180  
aggttcagtg gcagtgggtc tgggacagaa ttcactctca ccatcagcag cctacagtct 240  
gaagattttg cagtttatta ctgtcagcag tataataact ggccctcggac gttcggccaa 300  
gggaccaagg tggaaatcaa ac 322

<210> 37  
<211> 121  
<212> PRT  
<213> Homo Sapiens

<400> 37  
 Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu  
 1 5 10 15  
 Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly Ser Ile Ser Thr Tyr  
 20 25 30  
 Tyr Trp Ser Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile  
 35 40 45  
 Gly Tyr Ile Tyr Tyr Thr Gly Asn Thr Tyr Tyr Asn Pro Ser Leu Lys  
 50 55 60  
 Ser Arg Val Thr Val Ser Val Asp Thr Ser Lys Asn Gln Phe Ser Leu  
 65 70 75 80  
 Lys Leu Asn Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala  
 85 90 95  
 Arg Asp Pro Gly Gln Trp Leu Val Pro Asp Ala Phe Asp Ile Trp Gly  
 100 105 110  
 Gln Gly Thr Met Val Ser Val Ser Ser  
 115 120

<210> 38  
 <211> 112  
 <212> PRT  
 <213> Homo Sapiens

<400> 38  
 Asp Ile Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Ile Pro Gly  
 1 5 10 15  
 Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu Gln Ser  
 20 25 30  
 Asn Gly Asn Asn Tyr Leu Asp Trp Tyr Leu Gln Lys Pro Gly Gln Ser  
 35 40 45  
 Pro Gln Leu Leu Ile Tyr Leu Gly Ser Asn Arg Ala Ser Gly Val Pro  
 50 55 60  
 Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile  
 65 70 75 80  
 Ser Arg Val Glu Ala Asp Asp Val Gly Ile Tyr Tyr Cys Met Gln Ala  
 85 90 95  
 Leu Gln Ile Pro Leu Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys  
 100 105 110

<210> 39  
 <211> 364  
 <212> DNA  
 <213> Homo Sapiens

<400> 39  
 caggtgcagc tgcaggagtc gggcccagga ctggtgaagc cctcggagac cctgtccctc 60  
 acctgcactg tctctggttg ctccatcagt acttactact ggagttggat ccggcagccc 120  
 ccagggaagg gactggagtg gattggatac atctattaca ctgggaacac ctactacaac 180  
 cctccctca agagtcgagt caccgtttca gttgacacgt ccaagaacca gttctccctg 240  
 aagctgaact ctgtgaccgc tgcggacacg gccgtgtatt actgtgagag agatccaggc 300  
 cagtggctgg tccctgatgc ttttgatata tggggccaag ggacaatggt ctccgtctct 360  
 tcag 364

<210> 40  
 <211> 337

<212> DNA  
 <213> Homo Sapiens

<400> 40  
 gatattgtga tgactcagtc tccactctcc ctgcccgtca ttcctggaga gccggcctcc 60  
 atctcctgca ggtctagtca gagcctcctg cagagtaatg gaaacaacta tttggattgg 120  
 tacctgcaga agccagggca gtctccacag ctcctgatct atttgggttc taatcggggc 180  
 tccgggggtcc ctgacagggt cagtggcagt ggatcaggca cagattttac actgaaaatc 240  
 agcagagtgg aggctgacga tgttgggatt tattactgca tgcaagctct ccaaattcct 300  
 ctcactttcg gcggaggag caaggtggag atcaaac 337

<210> 41  
 <211> 97  
 <212> PRT  
 <213> Homo sapiens

<400> 41  
 Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu  
 1 5 10 15  
 Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly Ser Ile Ser Ser Tyr  
 20 25 30  
 Tyr Trp Ser Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile  
 35 40 45  
 Gly Tyr Ile Tyr Tyr Ser Gly Ser Thr Asn Tyr Asn Pro Ser Leu Lys  
 50 55 60  
 Ser Arg Val Thr Ile Ser Val Asp Thr Ser Lys Asn Gln Phe Ser Leu  
 65 70 75 80  
 Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala  
 85 90 95  
 Arg

<210> 42  
 <211> 96  
 <212> PRT  
 <213> Homo sapiens

<400> 42  
 Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu  
 1 5 10 15  
 Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly Ser Ile Ser Ser Tyr  
 20 25 30  
 Tyr Trp Ser Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile  
 35 40 45  
 Gly Tyr Ile Tyr Tyr Ser Ser Thr Asn Tyr Asn Pro Ser Leu Lys Ser  
 50 55 60  
 Arg Val Thr Ile Ser Val Asp Thr Ser Lys Asn Gln Phe Ser Leu Lys  
 65 70 75 80  
 Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Leu Tyr Tyr Cys Ala Arg  
 85 90 95

<210> 43  
 <211> 95  
 <212> PRT  
 <213> Homo sapiens

<400> 43

Asp	Ile	Gln	Met	Thr	Gln	Ser	Pro	Ser	Ser	Leu	Ser	Ala	Ser	Val	Gly
1				5				10						15	
Asp	Arg	Val	Thr	Ile	Thr	Cys	Arg	Ala	Ser	Gln	Ser	Ile	Ser	Ser	Tyr
		20						25					30		
Leu	Asn	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Lys	Ala	Pro	Lys	Leu	Leu	Ile
	35					40						45			
Tyr	Ala	Ala	Ser	Ser	Leu	Gln	Ser	Gly	Val	Pro	Ser	Arg	Phe	Ser	Gly
	50					55					60				
Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr	Leu	Thr	Ile	Ser	Ser	Leu	Gln	Pro
65					70					75					80
Glu	Asp	Phe	Ala	Thr	Tyr	Tyr	Cys	Gln	Gln	Ser	Tyr	Ser	Thr	Pro	
				85					90					95	

<210> 44

<211> 93

<212> PRT

<213> Homo sapiens

<400> 44

Asp	Ile	Gln	Met	Thr	Gln	Ser	Pro	Ser	Ser	Leu	Ser	Ala	Ser	Val	Gly
1				5				10						15	
Asp	Arg	Val	Thr	Ile	Thr	Cys	Arg	Ala	Ser	Gln	Ser	Ile	Ser	Tyr	Leu
		20						25					30		
Asn	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Lys	Ala	Pro	Lys	Leu	Ile	Tyr	
	35					40						45			
Ala	Ala	Ser	Ser	Leu	Gln	Ser	Gly	Val	Pro	Ser	Arg	Phe	Ser	Gly	Ser
	50					55					60				
Gly	Ser	Gly	Thr	Asp	Phe	Thr	Leu	Thr	Ile	Ser	Ser	Leu	Gln	Pro	Glu
65					70					75					80
Asp	Phe	Ala	Thr	Tyr	Tyr	Cys	Gln	Ser	Tyr	Ser	Thr	Pro			
				85					90						

<210> 45

<211> 99

<212> PRT

<213> Homo sapiens

<400> 45

Gln	Val	Gln	Leu	Gln	Glu	Ser	Gly	Pro	Gly	Leu	Val	Lys	Pro	Ser	Gln
1				5					10					15	
Thr	Leu	Ser	Leu	Thr	Cys	Thr	Val	Ser	Gly	Gly	Ser	Ile	Ser	Ser	Gly
		20						25					30		
Gly	Tyr	Tyr	Trp	Ser	Trp	Ile	Arg	Gln	His	Pro	Gly	Lys	Gly	Leu	Glu
	35					40						45			
Trp	Ile	Gly	Tyr	Ile	Tyr	Tyr	Ser	Gly	Ser	Thr	Tyr	Tyr	Asn	Pro	Ser
	50					55					60				
Leu	Lys	Ser	Arg	Val	Thr	Ile	Ser	Val	Asp	Thr	Ser	Lys	Asn	Gln	Phe
65					70					75					80
Ser	Leu	Lys	Leu	Ser	Ser	Val	Thr	Ala	Ala	Asp	Thr	Ala	Val	Tyr	Tyr
				85					90					95	
Cys	Ala	Arg													

<210> 46  
 <211> 99  
 <212> PRT  
 <213> Homo sapiens

<400> 46  
 Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Gln  
 1 5 10 15  
 Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly Ser Ile Ser Ser Gly  
 20 25 30  
 Gly Tyr Tyr Trp Ser Trp Ile Arg Gln His Pro Gly Lys Gly Leu Glu  
 35 40 45  
 Trp Ile Gly Phe Ile Tyr Tyr Ser Gly Ser Thr Tyr Tyr Asn Pro Ser  
 50 55 60  
 Leu Lys Ser Arg Val Thr Ile Ser Val Asp Thr Ser Lys Asn Gln Phe  
 65 70 75 80  
 Ser Leu Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr  
 85 90 95  
 Cys Ala Arg

<210> 47  
 <211> 95  
 <212> PRT  
 <213> Homo sapiens

<400> 47  
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
 1 5 10 15  
 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp  
 20 25 30  
 Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile  
 35 40 45  
 Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly  
 50 55 60  
 Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro  
 65 70 75 80  
 Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro  
 85 90 95

<210> 48  
 <211> 95  
 <212> PRT  
 <213> Homo sapiens

<400> 48  
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
 1 5 10 15  
 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp  
 20 25 30  
 Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile  
 35 40 45  
 Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly  
 50 55 60



Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro  
65 70 75 80  
Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro  
85 90 95

<210> 49  
<211> 97  
<212> PRT  
<213> Homo sapiens

<400> 49  
Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu  
1 5 10 15  
Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly Ser Ile Ser Ser Tyr  
20 25 30  
Tyr Trp Ser Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile  
35 40 45  
Gly Tyr Ile Tyr Tyr Ser Gly Ser Thr Asn Tyr Asn Pro Ser Leu Lys  
50 55 60  
Ser Arg Val Thr Ile Ser Val Asp Thr Ser Lys Asn Gln Phe Ser Leu  
65 70 75 80  
Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala  
85 90 95  
Arg

<210> 50  
<211> 96  
<212> PRT  
<213> Homo sapiens

<400> 50  
Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu  
1 5 10 15  
Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly Ser Ile Ser Ser Tyr  
20 25 30  
Tyr Trp Ser Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile  
35 40 45  
Gly Tyr Ile Tyr Tyr Ser Ser Ser Asn Tyr Asn Pro Ser Leu Lys Ser  
50 55 60  
Arg Val Thr Ile Ser Val Asp Thr Ser Lys Asn Gln Phe Ser Leu Lys  
65 70 75 80  
Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala Arg  
85 90 95

<210> 51  
<211> 95  
<212> PRT  
<213> Homo sapiens

<400> 51  
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
1 5 10 15  
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp

			20					25				30				
Leu	Gly	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Lys	Ala	Pro	Lys	Arg	Leu	Ile	
		35					40					45				
Tyr	Ala	Ala	Ser	Ser	Leu	Gln	Ser	Gly	Val	Pro	Ser	Arg	Phe	Ser	Gly	
	50					55					60					
Ser	Gly	Ser	Gly	Thr	Glu	Phe	Thr	Leu	Thr	Ile	Ser	Ser	Leu	Gln	Pro	
65					70					75					80	
Glu	Asp	Phe	Ala	Thr	Tyr	Tyr	Cys	Leu	Gln	His	Asn	Ser	Tyr	Pro		
				85					90					95		

<210> 52  
 <211> 95  
 <212> PRT  
 <213> Homo sapiens

<400> 52																
Asp	Ile	Gln	Met	Thr	Gln	Ser	Pro	Ser	Ser	Leu	Ser	Ala	Ser	Val	Gly	
1				5					10					15		
Asp	Arg	Val	Thr	Ile	Thr	Cys	Arg	Ala	Ser	Gln	Gly	Ile	Arg	Asn	Asp	
		20						25				30				
Leu	Gly	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Lys	Ala	Pro	Lys	Arg	Leu	Ile	
	35					40					45					
Tyr	Ala	Ala	Ser	Ser	Leu	Gln	Ser	Gly	Val	Pro	Ser	Arg	Phe	Ser	Gly	
	50					55					60					
Ser	Gly	Ser	Gly	Thr	Glu	Phe	Thr	Leu	Thr	Ile	Ser	Ser	Leu	Gln	Pro	
65					70					75					80	
Glu	Asp	Phe	Ala	Thr	Tyr	Tyr	Cys	Leu	Gln	His	Asn	Ser	Tyr	Pro		
				85					90					95		

<210> 53  
 <211> 98  
 <212> PRT  
 <213> Homo sapiens

<400> 53																
Gln	Val	Gln	Leu	Val	Gln	Ser	Gly	Ala	Glu	Val	Lys	Lys	Pro	Gly	Ala	
1				5					10					15		
Ser	Val	Lys	Val	Ser	Cys	Lys	Ala	Ser	Gly	Tyr	Thr	Phe	Thr	Ser	Tyr	
		20						25				30				
Gly	Ile	Ser	Trp	Val	Arg	Gln	Ala	Pro	Gly	Gln	Gly	Leu	Glu	Trp	Met	
	35					40					45					
Gly	Trp	Ile	Ser	Ala	Tyr	Asn	Gly	Asn	Thr	Asn	Tyr	Ala	Gln	Lys	Leu	
	50					55					60					
Gln	Gly	Arg	Val	Thr	Met	Thr	Thr	Asp	Thr	Ser	Thr	Ser	Thr	Ala	Tyr	
65					70					75					80	
Met	Glu	Leu	Arg	Ser	Leu	Arg	Ser	Asp	Asp	Thr	Ala	Val	Tyr	Tyr	Cys	
				85					90					95		

Ala Arg

<210> 54  
 <211> 96  
 <212> PRT  
 <213> Homo sapiens

<400> 54

Gln	Val	Gln	Leu	Val	Gln	Ser	Gly	Ala	Glu	Val	Lys	Lys	Pro	Gly	Ala
1				5					10					15	
Ser	Val	Lys	Val	Ser	Cys	Lys	Ala	Ser	Gly	Tyr	Thr	Phe	Ser	Tyr	Gly
		20						25					30		
Ser	Trp	Val	Arg	Gln	Ala	Pro	Gly	Gln	Gly	Leu	Glu	Trp	Leu	Gly	Trp
		35					40					45			
Ile	Ser	Ala	Tyr	Asn	Gly	Asn	Thr	Asn	Tyr	Ala	Gln	Lys	Leu	Gln	Gly
	50					55					60				
Arg	Val	Thr	Met	Thr	Thr	Asp	Thr	Ser	Thr	Ser	Thr	Ala	Tyr	Met	Glu
65					70					75					80
Leu	Arg	Ser	Leu	Arg	Ser	Asp	Asp	Thr	Ala	Val	Tyr	Tyr	Cys	Ala	Arg
				85					90					95	

<210> 55

<211> 101

<212> PRT

<213> Homo sapiens

<400> 55

Asp	Ile	Val	Met	Thr	Gln	Ser	Pro	Asp	Ser	Leu	Ala	Val	Ser	Leu	Gly
1				5					10					15	
Glu	Arg	Ala	Thr	Ile	Asn	Cys	Lys	Ser	Ser	Gln	Ser	Val	Leu	Tyr	Ser
		20						25					30		
Ser	Asn	Asn	Lys	Asn	Tyr	Leu	Ala	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Gln
		35					40					45			
Pro	Pro	Lys	Leu	Leu	Ile	Tyr	Trp	Ala	Ser	Thr	Arg	Glu	Ser	Gly	Val
	50					55					60				
Pro	Asp	Arg	Phe	Ser	Gly	Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr	Leu	Thr
65					70					75					80
Ile	Ser	Ser	Leu	Gln	Ala	Glu	Asp	Val	Ala	Val	Tyr	Tyr	Cys	Gln	Gln
				85					90					95	
Tyr	Tyr	Ser	Thr	Pro											
				100											

<210> 56

<211> 98

<212> PRT

<213> Homo sapiens

<400> 56

Asp	Ile	Val	Met	Thr	Gln	Ser	Pro	Asp	Ser	Leu	Ala	Val	Ser	Leu	Gly
1				5					10					15	
Glu	Arg	Ala	Thr	Ile	Cys	Lys	Ser	Ser	Gln	Ser	Ile	Leu	Tyr	Ser	Ser
		20						25					30		
Asn	Asn	Lys	Asn	Tyr	Leu	Ala	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Gln	Pro
		35					40					45			
Pro	Lys	Leu	Leu	Ile	Tyr	Trp	Ala	Ser	Thr	Arg	Glu	Ser	Gly	Val	Pro
	50					55					60				
Arg	Phe	Ser	Gly	Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr	Leu	Thr	Ile	Ser
65					70					75					80
Leu	Gln	Ala	Glu	Asp	Val	Ala	Val	Tyr	Tyr	Cys	Gln	Gln	Tyr	Tyr	Ser
				85					90					95	
Thr	Pro														

<210> 57  
 <211> 99  
 <212> PRT  
 <213> Homo sapiens

<400> 57  
 Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Gln  
 1 5 10 15  
 Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly Ser Ile Ser Ser Gly  
 20 25 30  
 Gly Tyr Tyr Trp Ser Trp Ile Arg Gln His Pro Gly Lys Gly Leu Glu  
 35 40 45  
 Trp Ile Gly Tyr Ile Tyr Tyr Ser Gly Ser Thr Tyr Tyr Asn Pro Ser  
 50 55 60  
 Leu Lys Ser Arg Val Thr Ile Ser Val Asp Thr Ser Lys Asn Gln Phe  
 65 70 75 80  
 Ser Leu Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr  
 85 90 95  
 Cys Ala Arg

<210> 58  
 <211> 95  
 <212> PRT  
 <213> Homo sapiens

<400> 58  
 Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Gln  
 1 5 10 15  
 Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly Ser Ile Ser Gly Gly  
 20 25 30  
 Tyr Trp Ser Trp Ile Arg Gln His Pro Gly Lys Gly Leu Glu Trp Ile  
 35 40 45  
 Gly Tyr Ile Tyr Ser Gly Ser Thr Tyr Tyr Asn Pro Ser Leu Lys Ser  
 50 55 60  
 Arg Ile Thr Ile Ser Val Asp Thr Ser Lys Asn Gln Phe Ser Leu Lys  
 65 70 75 80  
 Leu Ser Met Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala Arg  
 85 90 95

<210> 59  
 <211> 95  
 <212> PRT  
 <213> Homo sapiens

<400> 59  
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
 1 5 10 15  
 Asp Arg Val Thr Ile Thr Cys Gln Ala Ser Gln Asp Ile Ser Asn Tyr  
 20 25 30  
 Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile  
 35 40 45

Tyr Asp Ala Ser Asn Leu Glu Thr Gly Val Pro Ser Arg Phe Ser Gly  
 50 55 60  
 Ser Gly Ser Gly Thr Asp Phe Thr Phe Thr Ile Ser Ser Leu Gln Pro  
 65 70 75 80  
 Glu Asp Ile Ala Thr Tyr Tyr Cys Gln Gln Tyr Asp Asn Leu Pro  
 85 90 95

<210> 60  
 <211> 92  
 <212> PRT  
 <213> Homo sapiens

<400> 60  
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
 1 5 10 15  
 Asp Arg Val Thr Ile Thr Cys Gln Ala Ser Gln Asp Ile Asn Tyr Leu  
 20 25 30  
 Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr  
 35 40 45  
 Asp Ala Ser Asn Leu Glu Thr Gly Val Pro Ser Arg Phe Ser Gly Ser  
 50 55 60  
 Gly Ser Gly Thr Asp Phe Thr Phe Thr Ile Ser Leu Gln Pro Glu Asp  
 65 70 75 80  
 Ile Ala Thr Tyr Tyr Cys Gln Gln Tyr Asp Leu Pro  
 85 90

<210> 61  
 <211> 98  
 <212> PRT  
 <213> Homo sapiens

<400> 61  
 Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg  
 1 5 10 15  
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr  
 20 25 30  
 Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val  
 35 40 45  
 Ala Val Ile Ser Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val  
 50 55 60  
 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr  
 65 70 75 80  
 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys  
 85 90 95  
 Ala Arg

<210> 62  
 <211> 98  
 <212> PRT  
 <213> Homo sapiens

<400> 62  
 Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg

1				5					10					15			
Ser	Leu	Arg	Leu	Ser	Cys	Ala	Ala	Ser	Gly	Phe	Thr	Phe	Ser	Ser	Tyr		
			20					25					30				
Ala	Met	His	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Val		
		35					40					45					
Ala	Val	Ile	Ser	Tyr	Asp	Gly	Ser	Asn	Lys	Tyr	Tyr	Ala	Asp	Ser	Val		
	50					55					60						
Lys	Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn	Ser	Lys	Asn	Thr	Leu	Tyr		
65					70				75						80		
Leu	Gln	Met	Asn	Ser	Leu	Arg	Ala	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys		
			85					90					95				

Ala Arg

<210> 63  
 <211> 95  
 <212> PRT  
 <213> Homo sapiens

<400> 63																	
Asp	Ile	Gln	Met	Thr	Gln	Ser	Pro	Ser	Ser	Leu	Ser	Ala	Ser	Val	Gly		
1				5				10					15				
Asp	Arg	Val	Thr	Ile	Thr	Cys	Arg	Ala	Ser	Gln	Gly	Ile	Ser	Asn	Tyr		
		20					25					30					
Leu	Ala	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Lys	Val	Pro	Lys	Leu	Leu	Ile		
	35					40					45						
Tyr	Ala	Ala	Ser	Thr	Leu	Gln	Ser	Gly	Val	Pro	Ser	Arg	Phe	Ser	Gly		
	50				55				60								
Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr	Leu	Thr	Ile	Ser	Ser	Leu	Gln	Pro		
65				70				75							80		
Glu	Asp	Val	Ala	Thr	Tyr	Tyr	Cys	Gln	Lys	Tyr	Asn	Ser	Ala	Pro			
			85					90					95				

<210> 64  
 <211> 91  
 <212> PRT  
 <213> Homo sapiens

<400> 64																	
Asp	Ile	Gln	Met	Thr	Gln	Ser	Pro	Ser	Ser	Leu	Ser	Ala	Ser	Val	Gly		
1				5				10					15				
Asp	Arg	Val	Thr	Ile	Thr	Cys	Arg	Ala	Ser	Gln	Gly	Ile	Asn	Tyr	Leu		
		20					25					30					
Ala	Trp	Tyr	Gln	Gln	Pro	Gly	Lys	Val	Pro	Lys	Leu	Leu	Ile	Tyr	Ala		
	35					40					45						
Ala	Ser	Thr	Leu	Gln	Ser	Gly	Val	Pro	Ser	Arg	Phe	Ser	Gly	Ser	Gly		
	50				55				60								
Ser	Gly	Thr	Asp	Phe	Thr	Leu	Thr	Ile	Ser	Ser	Leu	Gln	Pro	Glu	Asp		
65			70					75							80		
Val	Ala	Thr	Tyr	Tyr	Cys	Gln	Lys	Phe	Ser	Pro							
			85					90									

<210> 65  
 <211> 99

<212> PRT  
 <213> Homo sapiens

<400> 65  
 Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Gln  
 1 5 10 15  
 Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly Ser Ile Ser Ser Gly  
 20 25 30  
 Gly Tyr Tyr Trp Ser Trp Ile Arg Gln His Pro Gly Lys Gly Leu Glu  
 35 40 45  
 Trp Ile Gly Tyr Ile Tyr Tyr Ser Gly Ser Thr Tyr Tyr Asn Pro Ser  
 50 55 60  
 Leu Lys Ser Arg Val Thr Ile Ser Val Asp Thr Ser Lys Asn Gln Phe  
 65 70 75 80  
 Ser Leu Lys Leu Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr  
 85 90 95  
 Cys Ala Arg

<210> 66  
 <211> 95  
 <212> PRT  
 <213> Homo sapiens

<400> 66  
 Gln Val Gln Leu Ser Gly Pro Gly Leu Val Lys Pro Ser Thr Leu Ser  
 1 5 10 15  
 Leu Thr Cys Thr Val Ser Gly Gly Ser Ile Ser Ser Gly Tyr His Trp  
 20 25 30  
 Ser Trp Ile Arg Gln His Pro Gly Lys Gly Leu Glu Trp Ile Gly Tyr  
 35 40 45  
 Ile Tyr Tyr Ser Gly Ser Thr Tyr His Asn Pro Ser Leu Lys Ser Arg  
 50 55 60  
 Ile Thr Ile Ser Val Asp Thr Ser Lys Asn Gln Phe Ser Leu Lys Leu  
 65 70 75 80  
 Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala Arg  
 85 90 95

<210> 67  
 <211> 107  
 <212> PRT  
 <213> Homo sapiens

<400> 67  
 Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu Ser Val Ser Pro Gly  
 1 5 10 15  
 Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Ile Ser Asn Asn  
 20 25 30  
 Phe Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile  
 35 40 45  
 Phe Gly Ala Ser Thr Arg Ala Thr Gly Ile Pro Ala Arg Phe Ser Gly  
 50 55 60  
 Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Ser  
 65 70 75 80  
 Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Asn Asn Trp Pro Arg

				85					90					95
Thr	Phe	Gly	Gln	Gly	Thr	Lys	Val	Glu	Ile	Lys				
				100					105					

<210> 68  
 <211> 93  
 <212> PRT  
 <213> Homo sapiens

<400> 68  
 Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu Ser Val Ser Pro Gly  
 1 5 10 15  
 Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Ile Ser Asn Ala  
 20 25 30  
 Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile Phe Gly  
 35 40 45  
 Ala Ser Thr Arg Ala Thr Gly Ile Pro Ala Arg Phe Ser Gly Ser Gly  
 50 55 60  
 Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Ser Glu Asp  
 65 70 75 80  
 Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Asn Asn Trp Pro  
 85 90

<210> 69  
 <211> 97  
 <212> PRT  
 <213> Homo sapiens

<400> 69  
 Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu  
 1 5 10 15  
 Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly Ser Ile Ser Ser Tyr  
 20 25 30  
 Tyr Trp Ser Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile  
 35 40 45  
 Gly Tyr Ile Tyr Tyr Ser Gly Ser Thr Asn Tyr Asn Pro Ser Leu Lys  
 50 55 60  
 Ser Arg Val Thr Ile Ser Val Asp Thr Ser Lys Asn Gln Phe Ser Leu  
 65 70 75 80  
 Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala  
 85 90 95  
 Arg

<210> 70  
 <211> 94  
 <212> PRT  
 <213> Homo sapiens

<400> 70  
 Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu  
 1 5 10 15  
 Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly Ser Ile Ser Ser Tyr  
 20 25 30



Tyr Trp Ser Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile  
                   35                  40                  45  
 Gly Tyr Ile Tyr Tyr Ser Gly Thr Tyr Asn Pro Ser Leu Lys Ser Arg  
           50                  55                  60  
 Val Thr Ile Ser Val Asp Thr Ser Lys Asn Gln Phe Ser Leu Lys Leu  
 65                  70                  75                  80  
 Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala Arg  
                   85                  90

<210> 71  
 <211> 100  
 <212> PRT  
 <213> Homo sapiens

<400> 71  
 Asp Ile Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly  
 1                  5                  10                  15  
 Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu His Ser  
           20                  25                  30  
 Asn Gly Tyr Asn Tyr Leu Asp Trp Tyr Leu Gln Lys Pro Gly Gln Ser  
           35                  40                  45  
 Pro Gln Leu Leu Ile Tyr Leu Gly Ser Asn Arg Ala Ser Gly Val Pro  
           50                  55                  60  
 Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile  
 65                  70                  75                  80  
 Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln Ala  
           85                  90                  95  
 Leu Gln Thr Pro  
                   100

<210> 72  
 <211> 96  
 <212> PRT  
 <213> Homo sapiens

<400> 72  
 Asp Ile Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Pro Gly Glu  
 1                  5                  10                  15  
 Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu Ser Asn Gly  
           20                  25                  30  
 Asn Tyr Leu Asp Trp Tyr Leu Gln Lys Pro Gly Gln Ser Pro Gln Leu  
           35                  40                  45  
 Leu Ile Tyr Leu Gly Ser Asn Arg Ala Ser Gly Val Pro Asp Arg Phe  
           50                  55                  60  
 Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile Ser Arg Val  
 65                  70                  75                  80  
 Glu Ala Asp Asp Val Gly Ile Tyr Tyr Cys Met Gln Ala Leu Gln Pro  
           85                  90                  95

<210> 73  
 <211> 99  
 <212> PRT  
 <213> Homo sapiens

<400> 73

Gln	Val	Gln	Leu	Gln	Glu	Ser	Gly	Pro	Gly	Leu	Val	Lys	Pro	Ser	Gln
1				5					10					15	
Thr	Leu	Ser	Leu	Thr	Cys	Thr	Val	Ser	Gly	Gly	Ser	Ile	Ser	Ser	Gly
			20					25					30		
Gly	Tyr	Tyr	Trp	Ser	Trp	Ile	Arg	Gln	His	Pro	Gly	Lys	Gly	Leu	Glu
		35					40					45			
Trp	Ile	Gly	Tyr	Ile	Tyr	Tyr	Ser	Gly	Ser	Thr	Tyr	Tyr	Asn	Pro	Ser
	50					55					60				
Leu	Lys	Ser	Arg	Val	Thr	Ile	Ser	Val	Asp	Thr	Ser	Lys	Asn	Gln	Phe
65					70					75					80
Ser	Leu	Lys	Leu	Ser	Ser	Val	Thr	Ala	Ala	Asp	Thr	Ala	Val	Tyr	Tyr
				85					90					95	

Cys Ala Arg

<210> 74

<211> 95

<212> PRT

<213> Homo sapiens

<400> 74

Gln	Val	Gln	Leu	Ser	Gly	Pro	Gly	Leu	Val	Lys	Pro	Ser	Thr	Leu	Ser
1				5					10					15	
Leu	Thr	Cys	Thr	Val	Ser	Gly	Gly	Ser	Ile	Ser	Ser	Gly	Tyr	His	Trp
			20					25					30		
Ser	Trp	Ile	Arg	Gln	His	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Ile	Gly	Tyr
		35					40					45			
Ile	Tyr	Tyr	Ser	Gly	Ser	Thr	Tyr	His	Asn	Pro	Ser	Leu	Lys	Ser	Arg
	50					55					60				
Ile	Thr	Ile	Ser	Val	Asp	Thr	Ser	Lys	Asn	Gln	Phe	Ser	Leu	Lys	Leu
65					70					75					80
Ser	Ser	Val	Thr	Ala	Ala	Asp	Thr	Ala	Val	Tyr	Tyr	Cys	Ala	Arg	
				85					90					95	

<210> 75

<211> 95

<212> PRT

<213> Homo sapiens

<400> 75

Glu	Ile	Val	Met	Thr	Gln	Ser	Pro	Ala	Thr	Leu	Ser	Val	Ser	Pro	Gly
1				5					10					15	
Glu	Arg	Ala	Thr	Leu	Ser	Cys	Arg	Ala	Ser	Gln	Ser	Val	Ser	Ser	Asn
			20					25					30		
Leu	Ala	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Gln	Ala	Pro	Arg	Leu	Leu	Ile
		35					40					45			
Tyr	Gly	Ala	Ser	Thr	Arg	Ala	Thr	Gly	Ile	Pro	Ala	Arg	Phe	Ser	Gly
	50					55					60				
Ser	Gly	Ser	Gly	Thr	Glu	Phe	Thr	Leu	Thr	Ile	Ser	Ser	Leu	Gln	Ser
65					70					75					80
Glu	Asp	Phe	Ala	Val	Tyr	Tyr	Cys	Gln	Gln	Tyr	Asn	Asn	Trp	Pro	
				85					90					95	

<210> 76  
 <211> 93  
 <212> PRT  
 <213> Homo sapiens

<400> 76  
 Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu Ser Val Ser Pro Gly  
 1 5 10 15  
 Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Ile Ser Asn Ala  
 20 25 30  
 Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile Phe Gly  
 35 40 45  
 Ala Ser Thr Arg Ala Thr Gly Ile Pro Ala Arg Phe Ser Gly Ser Gly  
 50 55 60  
 Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Ser Glu Asp  
 65 70 75 80  
 Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Asn Asn Trp Pro  
 85 90

<210> 77  
 <211> 99  
 <212> PRT  
 <213> Homo sapiens

<400> 77  
 Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Gln  
 1 5 10 15  
 Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly Ser Ile Ser Ser Gly  
 20 25 30  
 Gly Tyr Tyr Trp Ser Trp Ile Arg Gln His Pro Gly Lys Gly Leu Glu  
 35 40 45  
 Trp Ile Gly Tyr Ile Tyr Tyr Ser Gly Ser Thr Tyr Tyr Asn Pro Ser  
 50 55 60  
 Leu Lys Ser Arg Val Thr Ile Ser Val Asp Thr Ser Lys Asn Gln Phe  
 65 70 75 80  
 Ser Leu Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr  
 85 90 95  
 Cys Ala Arg

<210> 78  
 <211> 98  
 <212> PRT  
 <213> Homo sapiens

<400> 78  
 Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Gln  
 1 5 10 15  
 Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly Ser Ile Ser Ser Gly  
 20 25 30  
 Tyr His Trp Ser Trp Ile Arg Gln His Pro Gly Lys Gly Leu Glu Trp  
 35 40 45  
 Ile Gly Tyr Ile Tyr Tyr Ser Gly Ser Thr Tyr Tyr Asn Pro Ser Leu  
 50 55 60  
 Lys Ser Arg Val Thr Ile Ser Val Asp Thr Ser Lys Asn Gln Phe Ser

65		70		75		80									
Leu	Lys	Leu	Ser	Ser	Val	Thr	Ala	Ala	Asp	Thr	Ala	Val	Tyr	Tyr	Cys
				85					90					95	
Ala	Arg														

<210> 79  
 <211> 95  
 <212> PRT  
 <213> Homo sapiens

<400> 79  
 Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu Ser Val Ser Pro Gly  
 1 5 10 15  
 Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Ser Asn  
 20 25 30  
 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile  
 35 40 45  
 Tyr Gly Ala Ser Thr Arg Ala Thr Gly Ile Pro Ala Arg Phe Ser Gly  
 50 55 60  
 Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Ser  
 65 70 75 80  
 Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Asn Asn Trp Pro  
 85 90 95

<210> 80  
 <211> 105  
 <212> PRT  
 <213> Homo sapiens

<400> 80  
 Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu Ser Val Ser Pro Gly  
 1 5 10 15  
 Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Asn Leu  
 20 25 30  
 Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile Tyr  
 35 40 45  
 Gly Ala Ser Thr Arg Ala Thr Gly Ile Pro Ala Arg Phe Ser Gly Ser  
 50 55 60  
 Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Ser Glu  
 65 70 75 80  
 Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Asn Asn Trp Pro Trp Gly  
 85 90 95  
 Gln Gly Thr Leu Val Thr Val Ser Ser  
 100 105

<210> 81  
 <211> 106  
 <212> PRT  
 <213> Homo sapiens

<400> 81  
 Gln Val Gln Leu Glu Gln Ser Gly Pro Gly Leu Val Lys Pro Ser Glu  
 1 5 10 15

Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly Ser Ile Ser Ser Gly  
                   20                  25                  30  
 Thr Tyr His Trp Ser Trp Ile Arg Gln His Pro Gly Arg Gly Leu Glu  
                   35                  40                  45  
 Trp Ile Gly Tyr Ile Tyr Tyr Ser Gly Ser Thr Tyr His Asn Pro Ser  
                   50                  55                  60  
 Leu Lys Ser Arg Ile Thr Ile Ser Val Asp Thr Ser Lys Asn Gln Phe  
 65                  70                  75                  80  
 Ser Leu Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr  
                   85                  90                  95  
 Cys Ala Arg Gly Gly Asp Gly Tyr Arg Tyr  
                   100                  105

<210> 82  
 <211> 95  
 <212> PRT  
 <213> Homo sapiens

<400> 82  
 Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu Ser Val Ser Pro Gly  
   1                  5                  10                  15  
 Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Ser Asn  
                   20                  25                  30  
 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile  
                   35                  40                  45  
 Tyr Gly Ala Ser Thr Arg Ala Thr Gly Ile Pro Ala Arg Phe Ser Gly  
                   50                  55                  60  
 Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Ser  
 65                  70                  75                  80  
 Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Asn Asn Trp Pro  
                   85                  90                  95

<210> 83  
 <211> 33  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic oligonucleotide primer sequence

<400> 83  
 atattacgaa ttcacttgcg tctcgccctc cgg 33

<210> 84  
 <211> 34  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic oligonucleotide primer sequence

<400> 84  
 cagcttagag ctagccggct ctccggctcc ggca 34

<210> 85

<211> 12	
<212> DNA	
<213> Homo sapiens	
<400> 85	
ggttcgggga gt	12
<210> 86	
<211> 18	
<212> DNA	
<213> Homo sapiens	
<400> 86	
cgatttttgg agtggtta	18
<210> 87	
<211> 11	
<212> DNA	
<213> Homo sapiens	
<400> 87	
cagtggtgg t	11
<210> 88	
<211> 11	
<212> DNA	
<213> Homo sapiens	
<400> 88	
gagatggcta c	11
<210> 89	
<211> 13	
<212> DNA	
<213> Homo sapiens	
<400> 89	
gagatggcta caa	13
<210> 90	
<211> 11	
<212> DNA	
<213> Homo sapiens	
<400> 90	
gagatggcta c	11